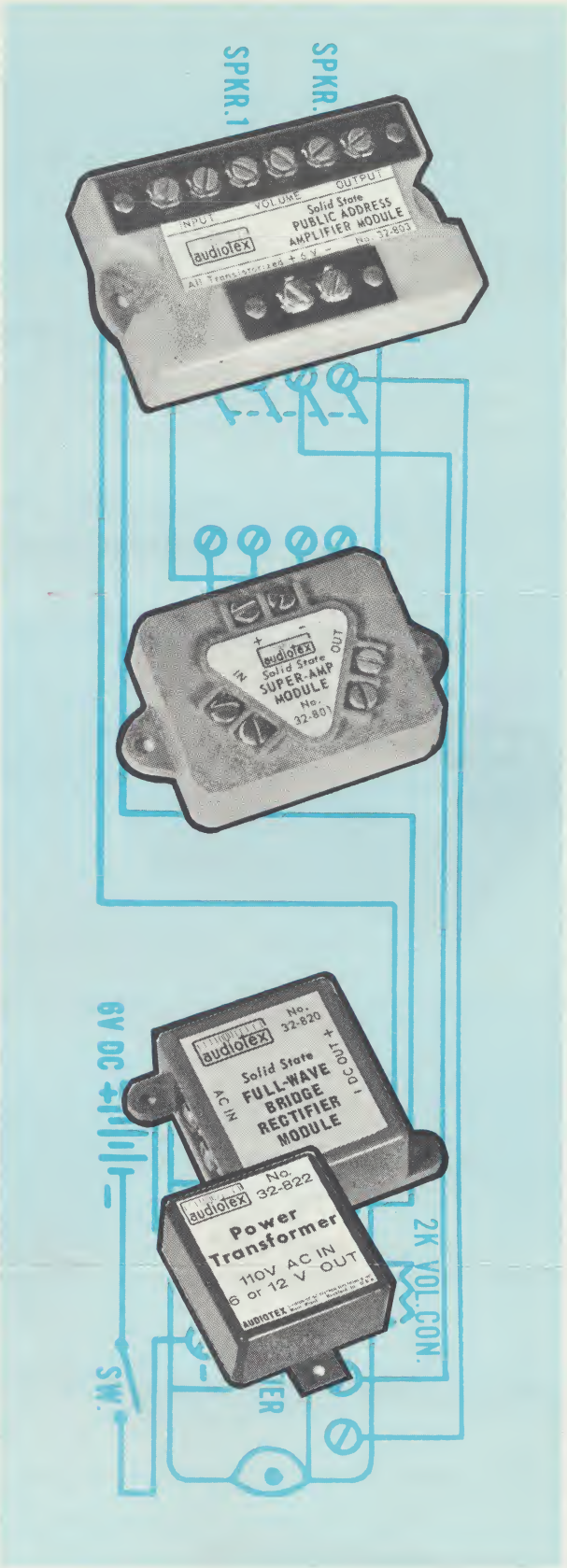
audiotex

transistorized

SOLID STATE

MODULES



POWER SUPPLY • CODE OSCILLATOR • FLASHER MODULE • METRONOME P. A. AMPLIFIER • FULL WAVE BRIDGE RECTIFIER

AN INTRODUCTION TO THE "ELECTRONIC BUILDING BLOCK"

AUDIOTEX

A Division of GC ELECTRONICS

EASTERN PLANT HICKSVILLE, L.I., N.Y. | MAIN PLANT ROCKFORD, ILL.U.S.A. | WESTERN PLANT LOS ANGELES, CALIF.

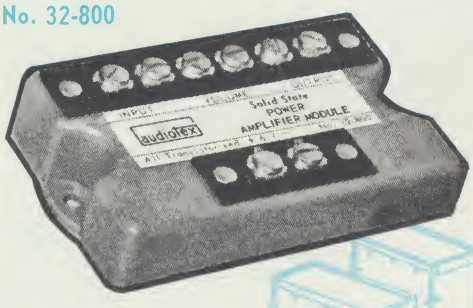
AUDIOTEX MODULES One of the most exciting lines introduced by Audiotex Home Electronics this year is the new transistorized SOLID STATE MODULE Line. This "space-age" development is so new and different that many people have had to ask "What is a module?"

In the electronics industry, the term "Module" has come to mean "A complete circuit that may function alone or as a part of a larger circuit". Each module is a complete electronic circuit which may be used alone or in more sophisticated circuits with other modules. Due to their physical appearance and the similarity of the drawings of module circuits to the familiar block diagrams of ordinary circuits, the modules have received the popular "nickname" of "Electronic Building Blocks". The following pages will tell you why.

On the following pages, each of the modules is described briefly and several circuits are shown. As you can see in the illustrations, all modules are equipped with screw terminals, no soldering is necessary. If continuous operation is planned, the "Power Train" modules are described on the last page. The power train modules supply continues power for the other modules from 117-VAC or normal "House current".

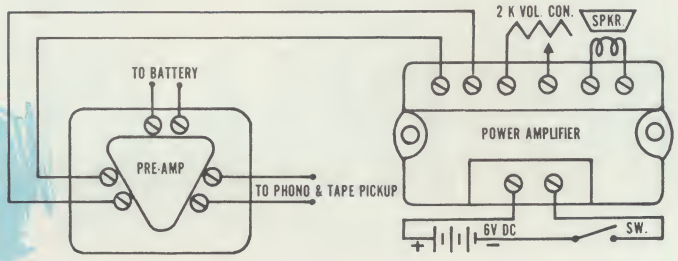
the Power Amplifier

No. 32-800



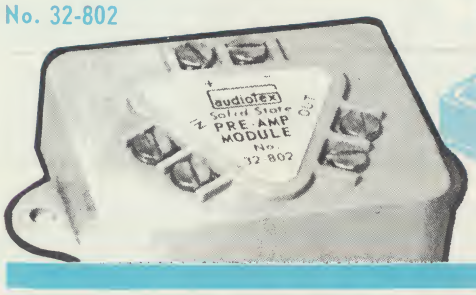
The power amplifier (peak output 2 watts) may easily be used in many other circuits of your own design..Remembering that the output may be either a 3.2 or 8 ohm speaker, the input a dynamic microphone, 3.2 or 8 ohm speaker or a preamplifier and the volume control 2K ohms, any circuit you can "dream-up" will work. Operation is on 6 volts DC and a switch may be added for convenience. Below is a circuit employing both the power amplifier and the phonograph pre-amplifier (32-802).

TYPICAL CIRCUIT



the Phono Preamplifier

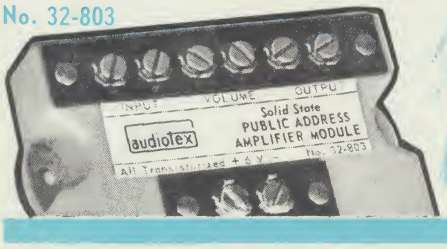
No. 32-802



The phonograph preamplifier is needed in circuits where the signal you wish to hear (such as that produced by a phono pick-up cartridge or a tape recorder head) is too weak to "drive" a normal power amplifier. It also operates on 6 VDC and can be connected directly to the power amplifier. Use two for stereo!

the Public Address Amplifier

No. 32-803



The public address amplifier is a 2 watt peak amplifier designed specifically for use in a PA system. Operation on 6 VDC, input a dynamic low-impedance microphone, output a 3.2 or 8 ohm speaker, and a 2K ohm volume control.

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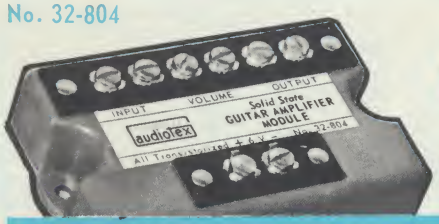
the Guitar Amplifier

No. 32-804



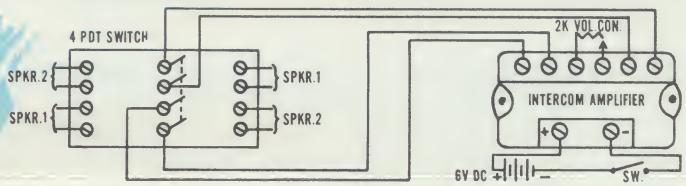
The guitar amplifier is a 2 watt peak amplifier specifically designed for use as a guitar amplifier. The output may be a 3.2 or 8 ohm speaker, volume control 2K ohms, operation on 6 VDC and input a low impedance contact guitar microphone. The guitar amplifier module is especially designed to respond to the resonance of folk and classical guitars.

the Intercom Amplifier

No. 32-805

The intercom amplifier is a 2 watt peak amplifier designed especially for intercom use. Input and output may be either a 3.2 or 8 ohm speaker. Operation is on 6 VDC and the volume control should be 2K ohms. A four pole-double-throw switch should be used for reversing the speakers connected to input and output (talk to listen switch).

TYPICAL CIRCUIT

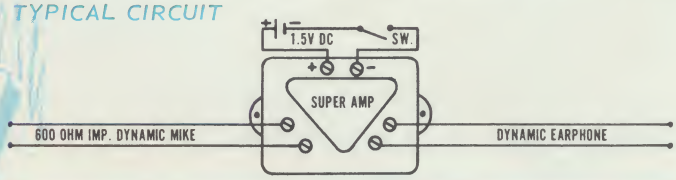


the Super Amplifier

No. 32-801

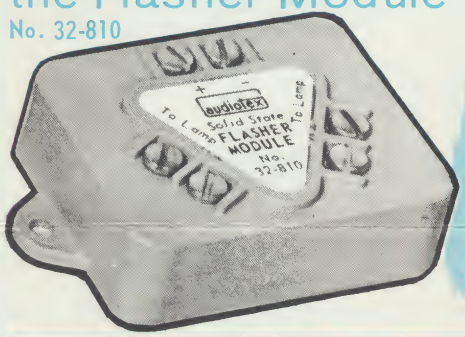
The super amplifier is an extremely high gain direct coupled amplifier and is extremely sensative. Input may be connected to a speaker, microphone, or telephone pick-up. It will drive a 2000 ohm earphone or headset and may be used as a hearing aid, electronic "snooper", baby sitter, etc. It operates on only 3 volts DC. You can literally listen through walls.

TYPICAL CIRCUIT



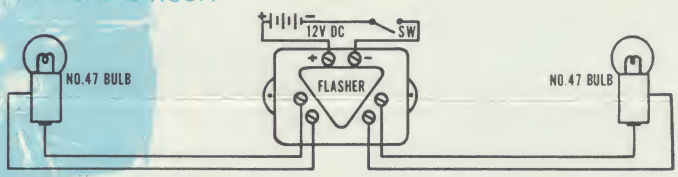
the Flasher Module

No. 32-810



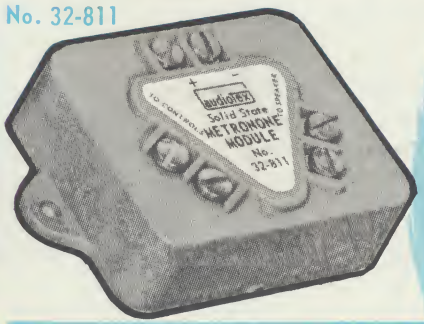
The flasher module may be used in promotional displays, as automobile and bicycle warning lights and numerous other functions. It will alternately flash two No. 47 bulbs (any color) and operates on 12 volts DC.

TYPICAL CIRCUIT



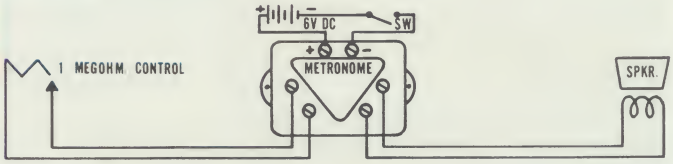
the Metronome Module

No. 32-811



The metronome module creates an adjustable beat from 20 to 220 cycles per minute. Add a one megohm control to adjust frequency. Operates on 6 VDC and never misses or jumps a beat.

TYPICAL CIRCUIT



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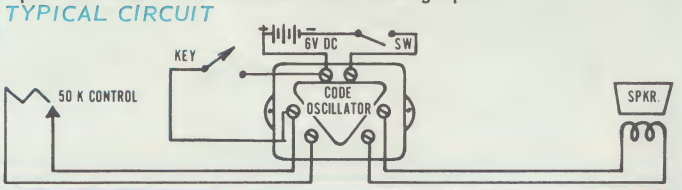
the Code Oscillator Module

No. 32-812

The code oscillator module reproduces the standard ICW signal for morse code practice and instruction. Required are a code key, a 3.2 ohm speaker, and a 6 VDC power source. A 50K ohm volume control may be added to control the pitch. Wire up two sets between houses as a "telegraph".

TYPICAL CIRCUIT



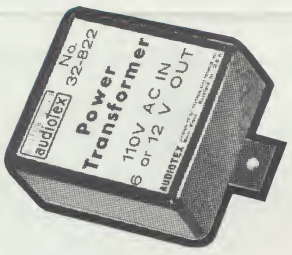
audiotex POWER TRAIN MODULES

IF MODULES ARE TO BE USED CONTINUOUSLY, BATTERIES MAY GET EXPENSIVE.

HOWEVER... by connecting together power transformer, a Full Wave Bridge Rectifier, and an Electronic Filter it is possible to build a "Battery Eliminator", or the Audiotex Power Train.

- TRANSFORMER
- RECTIFIER
- FILTER

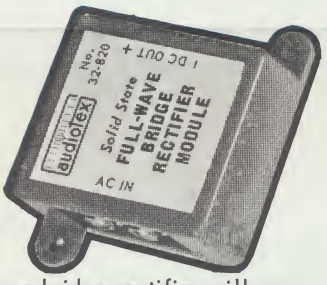
POWER SUPPLY



No. 32-822

All of the modules need electrical power to operate. For continuous operations, batteries may not be practical and thus we designed the power supply to allow operation from normal 117-VAC "House current". The power supply is a transformer and will convert house current to either 6 or 12 volts depending on how it is wired (instructions are packaged with each unit). The 6 or 12 volts is alternating current, however, and all electronic circuits operate on direct current. Thus we designed the:

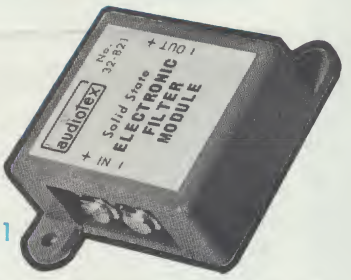
FULL WAVE BRIDGE RECTIFIER



No. 32-820

The full wave bridge rectifier will convert alternating current to direct current at either 6 or 12 volts. Power may be taken directly from the output to operate the other modules. The power transformer and full wave bridge rectifier connected together are now a power supply very similar to the circuit in any radio or TV set. There is a problem however, in any audio circuit that is operated from 60 cycle AC (house current). A very annoying hum is produced in the speaker or earphones. Service technicans call this a "60 cycle hum" as it is caused by the 60 cycle house current. Thus we designed the:

ELECTRONIC FILTER

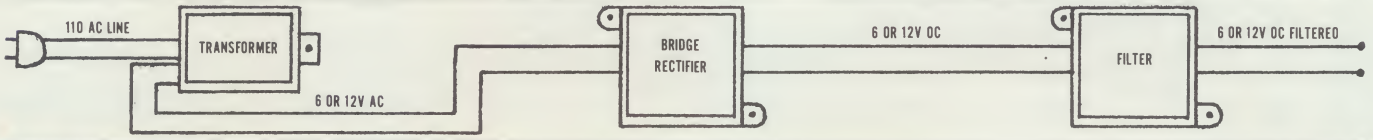


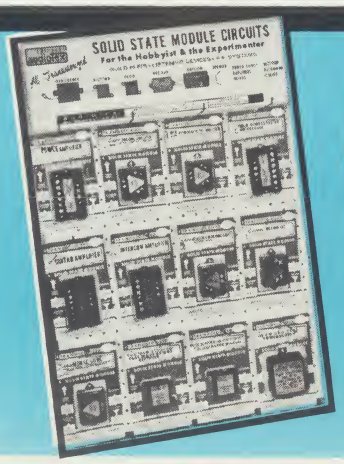
No. 32-821

The filter has only one function and that is to eliminate, or "filter", AC hum from the power supply.

Now you can undoubtedly see things beginning to add up. Any of the modules may be battery operated. But, if they are to be used continuously, batteries may get expensive. By connecting a power transformer, full wave bridge rectifier and electronic filter we have built a "battery eliminator". Let's take a look at the circuit below:

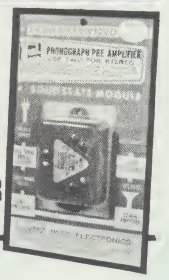
This series of three modules is referred to as the "power train" and they are described briefly on the instruction sheets for each of the other modules. One module, the Flasher No. 32-810, does not require the filter and may be operated directly from the output of the full wave bridge rectifier. This is because the flasher is not an audio module (no speakers or earphones are present to reproduce the "60 cycle AC hum").





LOOK FOR THIS AUDIOTEX MODULE DISPLAY...

- NO SOLDERING NECESSARY - SCREW TERMINALS
- FULL INSTALLATION INSTRUCTIONS WITH EACH UNIT
- ALL MODULES SUPPLIED WITH MOUNTING TABS
- NO SPECIAL TOOLS NECESSARY - JUST A SCREW DRIVER



Form FR-171-A

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